Before the
Administrative Hearing Commission
State of Missouri

CAPITAL SAND COMPANY, INC.,	)	
	)	
Petitioner,	)	
	)	
vs.	)	No. 09-0881 RS
	)	
DIRECTOR OF REVENUE,	)	
	)	
Respondent.	)	

DECISION

Capital Sand Company, Inc. ("Capital Sand") is not subject to sales or use tax on its purchases of equipment and parts, except for $222.91 (plus applicable interest and additions to tax) on the purchase of parts for a loadout bin that was not used by Capital Sand at its Jefferson City plant for mining, manufacturing, production, or processing purposes, but merely for storage.

Procedure

Capital Sand filed two complaints on June 22, 2009, challenging the Director of Revenue's ("the Director's") assessments of sales and use tax for the periods of April 2001 through March 2004 and October 2004 through December 2007 (the "audit periods"). The complaint for the April 2001-March 2004 period was assigned case number 09-0881 RS, and the complaint for the other period was assigned case number 09-0882 RS. The Director filed answers to those complaints on July 23, 2009. We consolidated the two cases into case number

09-0881 RS on October 28, 2009. Capital Sand filed an amended complaint on October 21, 2010, and the Director filed an answer to the amended complaint on November 5, 2010.

We held a hearing on September 28 and 29, 2011. Capital Sand was represented by Edward Downey of Bryan Cave LLP. The Director was represented by legal counsels Christopher R. Fehr and Katie Kiefer. The case became ready for decision on June 27, 2012, the date the last brief was filed.

Commissioner Marvin O. Teer, Jr., having read the full record including all the evidence, renders the decision.[1]

Findings of Fact

1. Capital Sand was at all relevant times a Missouri corporation engaged in obtaining sand, gravel, and (to a lesser extent) other materials and then sorting, altering, or combining those materials to create products it sold to final users or consumers.

2. Capital Sand obtained the above-listed materials by either dredging the bottom of the Missouri and Osage Rivers or removing the materials from sand or gravel bars located in alluvial plains of rivers or streams, or by extracting and removing the materials found beneath overburden[2] located in or around a former iron ore mine.

Obtaining Minerals and Other Material from the Missouri River

3. Sand and gravel are minerals. The primary mineral comprising sand and gravel is quartz.[3]

4. Capital Sand operated dredge barges in the Missouri River that used cutting heads. The cutting heads were conical, toothed bits at the end of drive shafts that descended from the barges at about a 45-degree angle into the water.

[1] Section 536.080.2; ***Angelos v. State Bd. of Regis'n for the Healing Arts***, 90 S.W.3d 189, 192-93 (Mo. App., S.D. 2002). Statutory references are to RSMo 2000 unless otherwise indicated.

[2] "Overburden" is defined as material overlying a deposit of useful geological materials or bedrock. Merriam-Webster's Collegiate Dictionary 884 (11th ed. 2004).

[3] Tr. 53.

5. The drive shaft would turn the cutting head, which engaged and burrowed into the river bed to a depth of up to 30 to 40 feet. That action created a "mixing zone" – a slurry of rock, gravel, sand, and other material.

6. Hydraulic pumps on the barges would pump the slurry on board the barge, where the sand and gravel were separated and, typically, loaded onto barges attached to the dredges. Material that Capital Sand did not use was returned to the river. When the barges became full, tugboats would transport the barges to riverbank dock barges. There, a front end loader would scoop up the sand or gravel and load it in hoppers. From the hoppers, the sand or gravel would be taken by conveyor systems to land, where it would either be processed or stored in stock piles, either for sale or for later processing.

7. Material thus obtained from the Missouri River was taken to and processed by Capital Sand's Jefferson City, Glasgow, Boonville, Rocheport, Carrollton, Lexington, and Washington facilities. All of these facilities were located in Missouri.

Obtaining minerals and other material from the Osage River

8. Capital Sand operated one dredge barge in the Osage River. Instead of a cutting head, this barge used a chainsaw-type cutter that, when activated, would dig into the river bed, creating a slurry "mixing zone" of the type referred to above.

9. Material thus obtained would be transported by pipeline to the river bank.

10. That material was taken to and processed by Capital Sand's Wardsville and Washington facilities. These facilities were located in Missouri.

Obtaining Minerals and Other Material from Land-Based Sources

11. Capital Sand used excavators and bulldozers to remove overburden covering the sand, gravel, or rock deposits it sought. The overburden was set aside for use (in some instances) to be used later as ingredients in various soil and sand mixtures that Capital Sand produced.

12. The uncovered sand, gravel, rock, or other material was removed by the excavators and bulldozers and loaded into haul trucks, to be taken to and processed by Capital Sand's Jefferson City, Lexington, Jerome, Washington, Rolla, and Sullivan facilities. All of these facilities were located in Missouri.

Processing Minerals and Other Material Onshore

13. Water was removed from the material and, as appropriate, reapplied to it.

14. Sand and gravel was sorted by size using industrial screens, jigs, and "all flux" machines.

15. Some gravel was crushed to make it smaller, to create angular faces on the gravel for use in "superpave" asphalt mix,[4] or both.

16. Materials were blended with each other and with other materials, e.g., dirt (such as obtained from the overburden mentioned above) to create products for sale. These products included various types of sand and pea gravel for use on golf courses, different types of masonry sand, and different types of sand for use in making concrete.[5]

17. Some materials were minimally processed.

Products Created by Capital Sand from its Operations and Sold by Them

18. Capital Sand produced the following gravel and other stone products:

- 3/8" clean chip (crushed)
- 3/8" minus chip (crushed)
- ½" nova chip (crushed)
- Osage pea gravel[6]
- 1" Osage gravel
- 1.5" Osage gravel
- Osage River run (rock)
- Osage oversize (rock)

[4] "Superpave" asphalt is an asphalt mix that includes hard rocks that have been crushed so as to create regular, instead of round, faces. The angular faces help prevent the rock from moving around in the asphalt while the asphalt hardens. Tr. 55.

[5] Tr. 59-63; Petitioner's Ex. 12.

[6] Some pea gravel products were made to be an underlying layer for golf greens in order to provide the appropriate level of permeability for water. Tr. 61.

- 1.5” minus crushed rock
- 1.5” Missouri river rock
- 5/16” Missouri river rock
- 7/16” Osage rock
- 3” oversize Missouri River rock
- 1.5” Osage rock
- 7/16” Missouri River pea gravel
- 1” Osage River rock

19. Capital Sand produced the following sand and sand mixtures:[7]

- 3/8” well packed sand
- Bunker sand
- State concrete sand
- Commercial sand
- Mason sand
- Fill sand
- Manufactured sand (crushed)
- Concrete sand
- Fine mason sand
- Coarse mason sand
- Classified sand
- Commercial asphalt sand
- State asphalt sand
- Processed sand
- Double-run processed sand
- Top dressing sand[8]
- Bunker sand[9]
- Divot sand[10]
- Greens mix[11]
- 85/15 greens mix
- 80/20 greens mix
- 90/10 greens mix
- Infield mix

[7] While some of the sand products listed here contained nothing but sand, they nonetheless constituted distinct products due to the size of the sand grains. Also, other uses of sand required particular blends. *See* Tr. 59-63 for testimony regarding the need for different sizes and blends of sand for different purposes.

[8] “Top dressing sand” was used when golf greens were aerated, to allow for a consistent percolation rate. Tr. 59.

[9] “Bunker sand” was used in golf bunkers and was blended so as to prevent the ball from sinking into the sand when it lands there. Tr. 60.

[10] “Divot sand,” used on golf courses, was dyed green by Capital Sand to better blend in with the surrounding grass. *Id.*

[11] Greens mixes were, as their name suggests, used as an underlying layer for golf greens. Tr. 60-61.

20. Capital Sand produced the following products other than stone, gravel, or sand

- Fill dirt
- 3/8 x 1/4 " MoDOT spec 4A[12]
- Mat material
- Filter media (1-3 mm)
- Filter media (3-5 mm)
- Unscreened topsoil

21. These products were intended to be sold ultimately for final use or consumption.

Third-Party Classifications of Operations Similar to Capital Sand's, and Permitting of Capital Sand's Operations

22. The North American Industry Classification System (NAICS) is the standard used by federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.[13] It assigned NAICS code 212321 to "sand and gravel and construction mining."[14]

23. The Occupational Safety and Health Administration (OSHA) assigned Standard Industry Classification (SIC) code 1442 to "construction sand and gravel mining."[15]

24. At all relevant times, Capital Sand's dredges and in-river operations had to have a valid authorization number from the Mine Safety & Health Administration.[16]

25. The Department of the Army granted permits to Capital Sand to dredge in the Missouri and Osage Rivers.[17]

26. Capital Sand had to obtain approval from the Land Reclamation Commission for any plan to operate in-stream mining or mining in the alluvial plain of any stream in Missouri.[18]

[12] This item, and the one listed directly below it, were not described or otherwise discussed at the hearing.
[13] United States Census Bureau, "North American Industry Classification System, Introduction to NAICS," http://www.census.gov/eos/www/naics/.
[14] Petitioner's Ex. 10; Tr. 36.
[15] Tr. 37.
[16] Tr. 50.
[17] *Id.*
[18] Tr. 51.

Functions Performed by Capital Sand Facilities

27. The Wardsville facility took the minerals and other material obtained by the dredge barge located on the Osage River, separated it by type (e.g., sand or gravel), cleaned it, removed or added water as appropriate, and crushed certain material as described above.

28. The Jefferson City facility took sand and gravel off barges, further separated it by size, remixed it with other materials, and added or removed water as appropriate. The facility could accommodate a crusher, but one was not used there during the time periods in question.

29. The Glasgow, Boonville, Rocheport, and Carrollton facilities took sand from barges that had obtained sand from the Missouri River dredges, dried it, sorted it, and put it in stockpiles, where it would either be sold as is or combined with other ingredients for sale.

30. The Lexington facility obtained material from both Missouri River dredges and from sand and gravel bars. It dried, sorted, and remixed the material.

31. The Jerome facility obtained material taken from sand and gravel bars in an alluvial flood plain near the Gasconade River and Little Piney Creek. It sorted materials, crushed rock and gravel, and mixed products.

32. The Washington facility obtained material from both Missouri River dredges and from sand and gravel bars. It dried, sorted, and remixed the material.

33. The Rolla facility obtained material from in-stream sand and gravel bars near the facility. The material was sorted and some of the gravel was crushed, both to reduce its size and to create fractured-face gravel for superpave asphalt.

34. The Sullivan-Pea Ridge facility was located at the site of a former iron ore mine. As described above, overburden was removed to expose minerals that were excavated, separated, crushed, and mixed for products.

35. The Springfield/Republic facility processed ingredients such as soil and sand that

were obtained from elsewhere. The facility tilled soil with rubber tire loaders, then with a large industrial rotating trammel screen.

36. Capital Sand operated a facility at Capital Lawn & Garden in Jefferson City. There, sand was dried and dyed to produce a golf divot mix. Soil was screened to remove clumps and was mixed with sand in various gradations.

Equipment and Parts Bought for use at Capital Sand's Facilities During the Audit Periods

37. The equipment and parts set out below were bought from in-state and out-of-state sellers.

38. During the audit periods, Capital Sand bought the following parts and equipment for use at its Wardsville facility:

- equipment and parts for the chain dredge it used;
- parts for mobile loaders;
- parts used on conveyors and loaders;
- electrical parts;
- parts for the facility's course[19] material washer, Eagle Sand Screw, bucket wheel, Eagle Classifier, sand belt, Hewlett Robbins machine, Tabor double deck screen, Eagle Course Material Screw, conveyors, electric shed, rubber tire loaders, electric control center, hydraulic excavator, water pump, feed bin/conveyor, large industrial vertical impact crusher, Cat and Cummings generators, and tools and supplies to install such parts.

39. During the audit periods, Capital Sand bought the following parts and equipment for use at its Jefferson City facility:

- equipment, equipment components, and parts used on a dredge that obtained material from the Missouri River;
- a tow boat used to service the barges,[20] and parts for the tow boat;
- other equipment, e.g., rubber tire loaders, front end loaders, a crane, a course material screw, a double deck screen, a gravel jig, and a pressure washer;
- parts used for mobile equipment used on land at the facility, conveyors, loaders, electrical parts, CFS density separators, All Mineral Jigs, a screen, an Eagle sand screw, a dock barge, a feed bin, an All Mineral All Flux, a sump pump, water

[19] So spelled in Capital Sand's filings.

[20] We determine the tow boat to be equipment under the definition of "equipment" set out in our conclusions of law below.

pumps, a Peerless pump, a Greystone sand screw, cluster bins, a Harp deck blending screen, a crane, classifying tanks, separating screens, rubber-tired loaders, a winch, and tools used to fabricate production equipment or replace parts.

40. Capital Sand also claimed an exemption from sales and use tax for its purchase of parts for a loadout bin used at the Jefferson City facility, but conceded in written argument that the bin was only used for storage of finished products. Sales tax of $222.91, plus applicable additions to tax and interest, has not been paid on the purchase of those parts.[21]

41. During the audit periods, Capital Sand bought the following parts and equipment for use at its Glasgow facility:

- a front end loader;
- parts for conveyors, electrical shed equipment, and a Harp Deck screen.

42. During the audit periods, Capital Sand bought parts for a dock barge, conveyor, and front end loader for use at its Boonville facility.

43. During the audit periods, Capital Sand bought parts for conveyors, electrical parts used in an electrical shed, and for front end loaders for use at its Rocheport facility.

44. During the audit periods, Capital Sand bought parts for a front-end loader for use at its Carrollton facility.

45. During the audit periods, Capital Sand bought the following equipment and parts for use at its Lexington facility:

- a dredge barge, sand barges, a tow boat, an excavator bucket (equipment);
- parts for the dredge barge, the dock barge, an unloading hopper conveyor, a channel conveyor, front end loaders, a classifier, conveyors, a gas tank used for fueling the front end loaders, a fine material screw, other processing equipment, an Eagle classifier, Eagle sand screws, electrical equipment, All Mineral Jigs, and a CFS separator.

[21] Petitioner's brief p. 48.

46. During the audit periods, Capital Sand bought parts for conveyors, rock crushers, water pumps, screening equipment, an Eagle course material washer, an Eagle sand screw, portable light equipment, mobile equipment (skid steer, dozer, loaders, excavator, grader, haul truck), electrical equipment, loaders, and a crusher for use at its Jerome facility.

47. During the audit periods, Capital Sand bought the following equipment and parts for use at its Washington facility:

- equipment used to construct a dredge barge, barges, a loader, for a dock barge, a feeder plate for an All Mineral Jig;
- parts for another dredge barge, tow boats, other equipment used to move product to land, conveyors, loaders, electric shed, conveyors, a radial stacker, scales, a slurry pump, an All Mineral Jig, and an Eagle Screw.

48. During the audit periods, Capital Sand bought a front-end loader (equipment) and parts for scales for use at its Rolla facility.

49. During the audit periods, Capital Sand bought the following equipment and parts for use at its Sullivan-Pea Ridge facility:

- dozers, excavators, haul trucks, front-end loaders, a vertical impact rock crusher (equipment);

- parts for dozers, excavators, haul trucks, front end loaders, conveyors, water pumps, a winch, a Kolberg portable feed hopper, conveyer, and screen, Eagle screws, a vertical impact rock crusher, and double deck screens.

50. During the audit periods, Capital Sand bought Parts for a dirt shredder, a Trommel screen, skid steers, front-end loaders, a bi-directional compost turner, a sand dryer, and conveyors for use at its Capital Lawn and Garden facility.

51. During the audit periods, Capital Sand bought parts for a trammel[22] screen, a front-end loader, and haul trucks for use at its Springfield/Republic facility.

The Director's Assessments

52. During 2008 and 2009, the Director audited Capital Sand for sales and use tax.

[22] So spelled in Petitioner's brief, p. 36.

As a result of that audit, the Director issued a final decision on April 24, 2009 that imposed assessments against Capital Sand for sales and use tax for the periods of April 2001 through March 2004 and December 2004 through December 2007 in an aggregate amount of $1,277,035.32. The amount was for sales tax, use tax, additions to tax, and statutory interest on the items described above under "Equipment and parts bought for use at Capital Sand's facilities during the audit periods." That amount was reduced by re-examination and re-calculation to $732,861.89. When further reduced by re-examination and re-calculation, and when additions to tax were added, the amount in dispute was resolved to be $769,396.[23]

53. On June 22, 2009, Capital Sand filed its original complaints with this Commission.

Conclusions of Law

This Commission has jurisdiction over appeals from the Director's final decisions.[24] Capital Sand has the burden to prove that it is not liable for the amounts assessed.[25] Our duty in a tax case is not merely to review the Director's decision, but to find the facts and to determine, by the application of existing law to those facts, the taxpayer's lawful tax liability for the period or transaction at issue.[26] The taxpayer has the burden to prove entitlement to a tax exemption.[27]

Section 144.020.1 imposes sales tax, as follows:

> A tax is hereby levied and imposed upon all sellers for the privilege of engaging in the business of selling tangible personal property or rendering taxable service at retail in this state. The rate of tax shall be as follows:
>
> (1) Upon every retail sale in this state of tangible personal property, . . . a tax equivalent to four percent of the purchase price paid or charged[.[28]]

[23] Petitioner's Ex. 2(a).
[24] Section 621.050.1.
[25] Sections 136.300.1 and 621.050.2.
[26] ***J.C. Nichols Co. v. Director of Revenue***, 796 S.W.2d 16, 20-21 (Mo. banc 1990).
[27] ***Cook Tractor Co. v. Director of Revenue***, 187 S.W.3d 870, 872 (Mo. banc 2006).
[28] RSMo 2012 Supp.

Section 144.610.1 imposes use tax as follows:

> A tax is imposed for the privilege of storing, using or consuming within this state any article of tangible personal property purchased on or after the effective date of sections 144.600 to 144.745 in an amount equivalent to the percentage imposed on the sales price in the sales tax law in section 144.020. This tax does not apply with respect to the storage, use or consumption of any article of tangible personal property purchased, produced or manufactured outside this state until the transportation of the article has finally come to rest within this state or until the article has become commingled with the general mass of property of this state.

Capital Sand claims an exemption from sales and use tax on a portion of its purchases of equipment and parts under § 144.030.2 which, at all relevant times, provided:

> 2. There are also specifically exempted from the provisions of the local sales tax law as defined in section 32.085, section 238.235, and sections 144.010 to 144.525 and 144.600 to 144.761 and from the computation of the tax levied, assessed or payable pursuant to the local sales tax law as defined in section 32.085, section 238.235, and sections 144.010 to 144.525 and 144.600 to 144.745:
>
> * * *
>
> (4) Replacement machinery, equipment, and parts and the materials and supplies solely required for the installation or construction of such replacement machinery, equipment, and parts, used directly in manufacturing, mining, fabricating or producing a product which is intended to be sold ultimately for final use or consumption; . . .
>
> (5) Machinery and equipment, and parts and the materials and supplies solely required for the installation or construction of such machinery and equipment, purchased and used to establish new or to expand existing manufacturing, mining or fabricating plants in the state if such machinery and equipment is used directly in manufacturing, mining or fabricating a product which is intended to be sold ultimately for final use or consumption[.[29]]

Also, for the period September-December 2007, Capital Sand claims an exemption under § 144.054.2, which, at all relevant times, provided:

[29] RSMo Supp. 2011. A new paragraph (4) was added by 2012 H.B. 1402, S.B. 470, and S.B. 480, thus renumbering these paragraphs as (5) and (6) respectively, although the language of the cited paragraphs did not change.

> In addition to all other exemptions granted under this chapter, there is hereby specifically exempted from the provisions of sections 144.010 to 144.525 and 144.600 to 144.761, and from the computation of the tax levied, assessed, or payable under sections 144.010 to 144.525 and 144.600 to 144.761,…machinery, equipment, and materials used or consumed in the manufacturing, processing, mining, or producing of any product[.]

Was Capital Sand engaged in mining?

Capital Sand claims that it excavates valuable minerals from the ground, and thus performs mining. However, a closer examination of Capital Sand's evidence shows that it obtains those minerals through several means, some of which require a word other than "excavation" to describe them. Capital Sand's general manager, Ray Bohlken, used the word "dredge" to describe its Missouri and Osage River operations, but even that word does not adequately describe those operations, which was also described at the hearing as the creation of a "mixing zone" – a slurry of water, sand, gravel, and rock – which is sucked either onto the barge (Missouri River) or to shore (Osage River). Because the mixing zone is created from sinking either a cutting head or a chain cutter up to 30-40 feet beneath the river bottom, it is not merely removing sand and sediment from the river bottom, a distinction that becomes important when considering the applicability of the rationale contained in the Director's Letter Ruling LR 3190, which we discuss below.

To determine whether Capital Sand's activities constitute "mining" for purposes of §§ 144.030.2(4) and (5) and 144.054.2, we examine the relevant case law, statutes other than §§ 144.030 and 144.054 that the parties assert are relevant to the issue, potentially applicable regulations, and secondary indicators such as classifications by and permitting requirements of governmental agencies.

Case Law

Both parties cite ***West Lake Quarry & Material Co. v. Schaffner***.[30] In ***West Lake Quarry***, the taxpayer removed overburden to expose the rock it sought to quarry, separated the rock from the earth through explosives, and removed the separated rock from a quarry pit. These actions, the Supreme Court held, constituted "mining" for purposes of § 144.030.2(5)'s predecessor statute, § 144.030.3(4) RSMo 1969.[31]

Not surprisingly, Capital Sand contends that the ***West Lake Quarry*** is essentially on all fours with its own situation, while the Director distinguishes it in several ways. We agree with the Director that there are differences. For one thing, a significant portion of Capital Sand's extractive work is performed underwater, using specialized equipment. However, we think the two procedures are sufficiently similar that, had ***West Lake Quarry*** been the only precedent for determining what constitutes "mining" for purposes of §§ 144.030 and 144.054, then we would agree with Capital Sand that the similarities between the two cases were sufficient to conclude that Capital Sand's activities constituted mining. As it is, however, we must consider other authorities as raised by the parties. But before doing so, we note that there is so little difference between ***West Lake Quarry's*** mining activities and Capital Sand's land-based activities as to conclude that with regard to those activities, they were definitely mining for purposes of the above-cited statutes.

The Director also cites ***Rotary Drilling Supply, Inc. v. Director of Revenue***[32] as support for his position. ***Rotary Drilling Supply*** held that drilling water wells for any purpose, or drilling test holes to discover subsurface minerals, was not "mining" for purposes of § 144.030.[33] The Director compares the drilling procedure described in ***Rotary Drilling Supply*** to the rotary-

[30] 451 S.W.2d 140 (Mo. 1970).
[31] *Id.* at 141.
[32] 662 S.W.2d 496 (Mo. banc 1983).
[33] *Id.* at 499.

driven cutting heads used by some of Capital Sand's barges as described above, and considers them sufficiently similar to apply the rule of that case to this case, or at least to the portion of this case where the cutting heads are used. And, as the Director points out, the Supreme Court in that case followed and adopted the holding of the Supreme Court of Louisiana[34] that oil and gas wells were not mines.

However, we disagree with the Director's position because the rotary cutter's purpose is nothing like that associated with drilling for water or test-drilling to discover minerals. As ***Rotary Drilling Supply*** points out, the holes drilled in that case were eight to twelve inches in diameter, only large enough to create a path for subsurface water to come or be pumped to the surface, or to provide a core sample to be inspected for the presence of minerals.[35] By contrast, in this case, the purpose of the cutting head was not to make a hole at all, but to disturb the river bottom and the subsurface beneath it, thus creating the mixing zone slurry from which Capital Sand could separate sand, gravel, and other materials.

Statutes Other Than §§ 144.030 or 144.054

The Director cites § 293.020, which states:

> Unless indicated otherwise, this chapter applies to all mines in this state engaged in the mining or extraction of minerals for commercial purposes, *except* barite, marble, limestone, and *sand and gravel*, or the prospecting for or the production of petroleum or natural gas; but does apply insofar as shale is mined or extracted for the purpose of recovering oil.

However, the Director fails to read the statute in context. The first indication is found in the words "this chapter applies." Chapter 293 is titled "Mining Regulations." As properly read,

[34] ***J.M. Guffey Petroleum Co. v. Murrel***, 53 So. 705 (La. 1910).
[35] 662 S.W.2d at 499.

therefore, § 293.020 does not constitute a definition of "mining," but is merely a statement of applicability of the regulations found in Chapter 293.[36]

The Director also cites § 444.765(11),[37] which, unlike § 293.020, is a definition of "mining," and read from the time of its amendment by 2005 H.B. 824[38] as follows:

> "Mining" [is defined as] the removal of overburden and extraction of underlying minerals or the extraction of minerals from exposed natural deposits for a commercial purpose, as defined by this section.

To aid in its construction of that definition, the Director cites § 444.765(10),[39] which, at all relevant times, read:

> "Mineral" [is defined as] a constituent of the earth in a solid state which, when extracted from the earth, is usable in its natural form or is capable of conversion into a usable form as a chemical, an energy source, or raw material for manufacturing or construction material. For the purposes of this section, *this definition* includes barite, tar sands, and oil shales, but *does not include* iron, lead, zinc, gold, silver, coal, surface or subsurface water, fill dirt, natural oil or gas together with other chemicals recovered therewith[.]

(Emphasis added.) Thus, the Director argues, "Missouri defines 'mining' in relation to 'minerals' rather than 'mines.'"[40] We do not find the Director's argument persuasive, given our finding that sand and gravel are minerals. Further, we think the description of "mining" found in § 444.765(11) well describes Capital Sand's river-based and land-based mining activities. Finally, we again look to the purpose of § 444.765, which begins:

> *Wherever used or referred to in sections 444.760 to 444.790*, unless a different meaning clearly appears from the context, the following terms mean[.]

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[36] We note that the Director made the same argument in ***West Lake Quarry***, which the Supreme Court rejected there as well. 451 S.W.2d at 142.

[37] RSMo Supp. 2006, now found at § 444.765(12), RSMo Supp. 2012.

[38] The definition of "mining" was added by this slip law. Hence, there was no such definition before the effective date of the law.

[39] RSMo Supp, 2006, now found at § 444.765(11), RSMo Supp. 2012.

[40] Respondent's brief at 8.

(Emphasis added.) Sections 444.760 to 444.790 are the Land Reclamation Act,[41] the stated purpose of which[42] is:

> to strike a balance between surface mining of minerals and reclamation of land subjected to surface disturbance by surface mining, as contemporaneously as possible, and for the conservation of land, and thereby to preserve natural resources, to encourage the planting of forests, to advance the seeding of grasses and legumes for grazing purposes and crops for harvest, to aid in the protection of wildlife and aquatic resources, to establish recreational, home and industrial sites, to protect and perpetuate the taxable value of property, and to protect and promote the health, safety and general welfare of the people of this state.

Given that this case does not concern the striking of a balance between surface mining of minerals and reclamation of land subjected to surface disturbance by surface mining, we decline to apply § 444.765(11) to this case.

Finally, the Director cites to 30 U.S.C. § 611, which provides:

> No deposit of common varieties of sand... [or] gravel…shall be deemed a valuable mineral deposit within the meaning of the mining laws of the United States so as to give effective validity to any mining claim hereafter located under such mining laws[.]

Again, however, the Director takes a statute out of context. Section 611's reference to "valuable minerals" does not refer to minerals generally, but to its limited application in a particular context. Specifically, § 611 concerns only those valuable minerals that would entitle a citizen to apply to the Department of Interior for title to public domain land, in the event the citizen found such valuable minerals there.[43]

Therefore, these statutes, cited out of context by the Director, do not support his position.

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[41] Section 444.760.

[42] *Id*.; *see also* ***Saxony Lutheran High School, Inc. v. Missouri Dep't of Nat'l Resources***, 404 S.W.3d 902, 906 (Mo. App., E.D. 2013).

[43] *See* ***United States v. Coleman***, 390 U.S. 599, 603-05 (1968) (holding that quartzite discovery on federal land could not support mining claim under 30 U.S.C. § 611 because it was commonly found outside federal lands). "Quartzite" is a compact granular rock composed of quartz, as is sand and gravel, and is derived from sandstone by metamorphism. Merriam-Webster's Collegiate Dictionary 1019 (11th ed. 2004).

Regulations

Capital Sand cites 10 CSR 40-10.010(1)(A)[44] as supporting its assertion that it "is engaged in mining minerals, namely sand and gravel." The regulation states in relevant part:

> (1) Operations Required to Have Permits. Any person, firm or corporation engaged in or controlling surface mining of industrial minerals in areas opened on or after January 1, 1972, must obtain a permit from the Land Reclamation Commission in accordance with section 444.770.1. and 444.770.2., RSMo. The effective date for having to obtain a permit for minerals not covered previously under the provisions of the Land Reclamation Act, as amended is August 28, 1990.
>
> (A) After August 28, 1990, surface mining for the following industrial minerals shall require a permit:
>
> 1. Gravel;
>
> * * *
>
> 10. Sand[.]

However, the "purpose" clause of this regulation states: "This rule sets forth requirements for permit application pursuant to sections 444.770, 444.772 and 444.778, RSMo," all sections within the Land Reclamation Act. While the Land Reclamation Act's purpose, as stated above, is "is to 'strike a balance' between surface mining of materials and reclaiming land that has been disturbed by such surface mining, for the conservation of land and preservation of natural resources,"[45] the inclusion of sand and gravel in a list of minerals for which a reclamation permit is required to mine them scarcely yields a definition of "mining" applicable to the sales and use tax law.

[44] All references to the CSR are to the Missouri Code of State Regulations as current with amendments included in the Missouri Register through the most recent update.

[45] Section 444.762; ***Lincoln Cnty. Stone Co. v. Koenig***, 21 S.W.3d 142, 145 (Mo. App., E.D. 2000).

Capital Sand also cites a regulation that does apply to this case, 12 CSR 10-111.010(2)(F).[46] Its purpose is stated as follows:

> Section 144.030.2(4) and (5), RSMo, exempts from taxation certain machinery, equipment, parts, materials and supplies. This rule explains what elements must be met in order to qualify for these exemptions.[47]

Paragraph (2)(F) of that regulation defines mining as:

> [t]he process of extracting from the earth precious or valuable metals, minerals or ores. This process includes quarrying, but does not include equipment used for water-well drilling or reclamation performed to restore previously mined land to its original state.

As we state above, Capital Sand's activities have nothing to do with water-well drilling or reclamation, and, as we found above, sand and gravel are minerals. Furthermore, the fact that Capital Sand can sell its sand and gravel, whether or not it performs additional processing on them, renders them "valuable." And we characterize Capital Sand's actions in obtaining the minerals as sufficiently fitting the definition of "extraction," which is either "to pull or take out forcibly, i.e., extracted a wisdom tooth," or "to withdraw (as a juice or fraction) by physical or chemical process."[48] Therefore, by the Director's own definition of "mining," we conclude that Capital Sand was engaged in mining.

The Director's Letter Ruling LR 3190

12 CSR 10-1.020 authorizes the Director to issue letter rulings. On March 7, 2002, the Director issued Letter Ruling 3190 ("LR 3190" or the "letter ruling"), titled "River Dredging and Related Equipment," and addressed to unnamed applicants. The letter ruling stated the facts as presented by the applicants in relevant part as follows:

> Applicants are expanding its operations by purchasing five pieces of equipment and an unloading facility. The five pieces of

[46] The Director also cites the regulation, but only as part of his general argument, stated above, that "Missouri defines 'mining in relation to 'minerals' rather than 'mines,'" an argument we found inapposite.

[47] 12 CSR 10-111.010, preliminary statement of purpose.

[48] Merriam-Webster's Collegiate Dictionary 444 (11th ed. 2004).

> equipment consist of a river dredge, a dock barge, two sand barges, and a towboat. The dredge will be placed in the Mississippi or Missouri River and its vacuum pumps remove sand and sediment from the river bottom. This dredge is registered with Mine Safety Health Administration (MSHA). The sand and sediment is transferred to the sand barges for transportation to shore. The towboat maneuvers the barges to shore where it docks with the dock barge. The dock barge then unloads the sand and sediment and transfers them to storage for retail sale.

The issue stated was:

> Are the unloading facility and the five pieces of equipment, including the river dredge, the dock barge, the towboat, and the two sand barges, exempt from Missouri sales tax pursuant to Section 144.030.2(5), RSMo, as machinery and equipment purchased and used to expand an existing mining plant?

The letter ruling answered that the facility and the pieces of equipment did not qualify for the new or expanded plant exemption of § 144.030.2(5), citing § 293.020 as excluding sand and gravel from the list of minerals extracted or mined that are covered by Chapter 293. The letter ruling also cited a definition of mining as "a large excavation made in the earth from which to extract metallic ores, coal, precious stones, sale, or certain other minerals…," and reiterated the Director's argument based on 30 U.S.C. § 611. The letter ruling summed up the Director's position as follows:

> Applicant is vacuuming sand and sediment from the river bottom. There is no excavation in the earth. In addition, federal law has excluded sand and gravel from the definition of minerals that are mined. Therefore, Applicant does not operate a "mining" operation as intended by the statutes. The machinery and equipment purchased by Applicant does not qualify for the sales tax exemption provided in Section 144.030.2(5).

While some of the facts stated in the letter ruling (the use of a river dredge and sand and dock barges) parallel those in this case, the activities involved in obtaining the material from the river bottom differ in two ways. First, where the letter ruling describes an operation involving only vacuuming sand and sediment from the river bottom, Capital Sand uses either a cutting head or a

chain cutter to both stir up the river bottom and the earth beneath it and create a slurry with the river water to make the mixing zone containing the sand and gravel it seeks. Second, the applicant in the letter ruling only takes the vacuumed material and sends it to shore, where it merely stores and then sells what it has vacuumed from the river bed. The second distinction is more relevant to the second part of our inquiry, whether Capital Sand's activities constituted manufacturing.

In any case, the facts in the letter ruling are sufficiently different from those of Capital Sand that we do not find its reasoning applicable to the facts in this case.[49]

Secondary Indicators Such as Classifications and Permitting Requirements of Governmental Agencies

Capital Sand also cites the actions of several state and federal governmental agencies that, in the course of their respective duties, made a connection between activities such as Capital Sand's and the word "mining." First, Capital Sand notes that the North American Industry Classification System assigned its NAICS code 212321 to "sand and gravel and construction mining."[50] Similarly, Capital Sand asserts that the Occupational Safety and Health Administration assigned an SIC (Standard Industry Classification) code of 1442 to "construction sand and gravel mining."[51]

Capital Sand also notes that it must obtain valid authorization numbers from the federal Mine Safety and Health Administration (MSHA) for some of its operations.[52] Similarly, it must obtain permits from the Department of the Army to dredge in the Missouri and Osage Rivers,[53]

[49] Furthermore, such letter rulings only apply to the particular fact situation stated in the letter ruling request, and only to the applicant making that request. 12 CSR 10-1.020(7)(A), (B).

[50] CS Ex. 10; Tr. 36.

[51] Tr. 37.

[52] Tr. 50.

[53] *Id.*

and must get its mining plans approved before it can conduct mining operations either in-stream or in the alluvial plan of any stream.[54]

Of course, none of these factors constitutes any proof that Capital Sand was conducting "mining" as the legislature intended that term to be interpreted when it enacted §§ 144.030 and 144.054. However, when we read ***West Lake Quarry***, which did apply the term to a taxpayer performing similar operations to Capital Sand's, and ***Rotary Drilling Supply***, whose activities bore no relationship to Capital Sand's activities, examined the statutes the Director cites but concluded are inapplicable here, and examined the Director's own regulation 12 CSR 10-111.010(2)(F), which defines "mining" in a manner so as to include Capital Sand's activities, we have no trouble concluding that Capital Sand was engaged in mining.

Was Capital Sand engaged in manufacturing?

"Manufacturing" consists of the alteration or physical change of an object or material in such a way that produces an article with a use, identity, and value different from the use, identity, and value of the original.[55] Capital Sand asserts that three of its activities constituted manufacturing: sorting of materials, crushing of rock and gravel, and blending of materials. We consider those activities in the order of their apparent connection with the word "manufacturing."

Crushing

The most obvious of the three activities is the crushing of rock and gravel. Capital Sand correctly cites to ***West Lake Quarry***, where the Supreme Court held that the taxpayer's activities in "break[ing] rock to certain sizes so that after the sizing…it can be sold as a product for final use or consumption," constituted manufacturing.[56]

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[54] Tr. 51.

[55] ***Galamet, Inc v Director of Revenue***, 915 S.W.2d 331, 333 (Mo. banc 1996), *cited in* ***Branson Props. USA LP v Director of Revenue***, 110 S.W.3d 824, 826 (Mo. banc 2003).

[56] 451 S.W.2d at 141, 143. We also note that West Lake Quarry used a machine called a "Pioneer Jaw Crusher" to accomplish this breaking.

Sorting

The next most obvious of the activities is sorting, which the taxpayer also did in ***West Lake Quarry***. In that case as well as this one, the materials, be they rock, gravel, or sand, were sent through screens and other equipment to segregate the materials by type as well as size, and the Supreme Court considered this activity to be included as manufacturing.[57]

Against such a conclusion, we note the Director's Regulation 12 CSR 10-111.010(2)(E), which states:

> Manufacturing does not include…processes that do not result in a change in the articles being processed (e.g., inspecting, *sorting*).

(Emphasis added.) However, given that ***West Lake Quarry*** expressly included sorting as an activity that constituted manufacturing, we must follow the Supreme Court's holding.

Blending

The third activity is blending. As Bohlken testified, Capital Sand blended different types of sand, and blended sand with other substances, to create products its consumers wanted.[58] Neither ***West Lake Quarry*** nor any other reported Missouri opinion of which we are aware considers whether such blending constitutes "manufacturing," so we return to the ***Galamet*** definition of the term, "the alteration or physical change of an object or material in such a way that produces an article with a use, identity, and value different from the use, identity, and value of the original."

We conclude that in this case, the blending of sand or gravel, either with different types of sand or gravel or with other materials, changed them so that such blending produced items with different uses, identities, and values from that of its original state. Bohlken used various types of sand sold for golf courses as examples. "Divot sand," used on golf courses, was dyed

[57] 451 S.W.2d at 141; *see also* ***Branson Props. USA, LP v. Director of Revenue***, 110 S.W.3d 824, 826 (Mo. banc 2003), which described the activities conducted by West Lake Quarry as "grinding, crushing, and sorting rock into various sizes for commercial use."

[58] *See, e.g.*, Tr. 39, 54-55, 58, 67, 73, 78, 83, 90, and 108.

green to better blend in with the surrounding grass. "Top dressing sand" was used when golf greens are aerated, to allow for a consistent percolation rate. "Bunker sand" was used in golf bunkers and was blended so as to prevent the ball from sinking into the sand when it lands there. Greens mixes are, as their name suggests, used as an underlying layer for golf greens. Also, Capital Sand blended sand and gravel to make a form of pea gravel that was also added as an underlying layer for golf greens in order to provide the appropriate level of permeability for water.

Capital Sand blended materials for other purposes. It created and sold at least five distinct types of sand: ASTM C-33-07 concrete sand, MoDOT 1005 concrete sand, ASTM C-144 masonry sand, fine masonry sand, and USGA bunker sand.[59] Bohlken explained that each sand was different in composition, and that composition was achieved in part by blending different types of sands and other aggregates.[60]

Therefore, we conclude that Capital Sand's blending activities, conducted as part of its processes for creating products its customers wanted, also constituted "manufacturing."

Was Capital Sand engaged in producing?

Capital Sand's amended complaint alleges that it used the equipment and parts it bought in manufacturing or producing "products" within the meaning of § 144.010.1(14). However, neither its brief nor its reply brief makes any argument that its production of such products entitled it to an exemption under § 144.030.2(4). As it stands, there is no need to do so, since we conclude that its activities constituted both mining and manufacturing. Furthermore, as ***Galamet*** held, "manufacturing" involves the *producing* of a product substantially different from the input material.[61]

[59] Petitioner's Ex. 12.
[60] Tr. 62-63.
[61] 915 S.W.2d at 333.

Did Capital Sand engage in processing?

Capital Sand also alleges that its activities constituted "processing" for purposes of § 144.054.2. Unlike "mining" and "manufacturing," the legislature provided a definition of "processing," as follows:

> any mode of treatment, act, or series of acts performed upon materials to transform or reduce them to a different state or thing, including treatment necessary to maintain or preserve such processing by the producer at the production facility[.[62]]

In accordance with our analysis above, we have no trouble concluding that, because Capital Sand performed modes of treatment and actions upon the materials it obtained that transformed them into different states or things, it processed as well as manufactured that material, thus qualifying it for the exemption under 144.054.2.

The Director's Arguments Against Manufacturing (or processing)

The Director asserts that "[t]he moving, cleaning, and sorting of sand is not manufacture or fabrication of a new product under [the definitions of manufacturing or fabricating]. The sand was at the bottom of the river. Its characteristics or possible uses were not changed or transformed by the dredging [of] it from the riverbed or moving, cleaning, drying, and sorting it into piles."[63] The Director further asserts that Bohlken admitted at the hearing that Capital Sand removes sand from the river and sells the same sand, but Capital Sand pointed out in its reply brief that the Director edited Bohlken's testimony, which was, in context, to the effect that the final sand products Capital Sand sold were quite different from the sand pulled out of the river.[64] We also note that the Director's argument seems directed less at Capital Sand and more at the unnamed taxpayer whose activities were described in LR 3190, as we discuss above.

[62] Section 144.054.1(1) RSMo Supp. 2006.
[63] Respondent's brief at 13.
[64] Petitioner's reply brief at 12.

The Director also cites his Regulation 12 CSR 10-111.010(2)(E) in support of his position, but then turns his argument into one that Capital Sand was not conducting fabrication, citing his regulation defining "fabrication," 12 CSR 111.010(2)(C). The problem with raising fabrication as an issue is that Capital Sand did not plead fabrication as one of the activities entitling it to an exemption under § 144.030.2. Hence, even to the extent that Capital Sand mentioned fabrication in its brief (and it did), we would not consider it as a ground for granting the exemption it seeks.

The Director also argues that Capital Sand was not making a new product, but merely selling the sand it removed from the riverbed. It likens Capital Sand's activities to a strawberry farmer claiming that she "manufactured" strawberries by growing them, picking them, washing and drying them, removing the bad strawberries, and packaging them for sale. He also points to ***L&R Egg Co. v. Director of Revenue***,[65] where the Supreme Court held that the cleaning, oiling, inspecting, weighing, grading, packing, and marking of eggs was not manufacturing for purposes of § 144.030.2.

Capital Sand responds, and we agree, that the Director's argument can be summarized as "sand is sand," and Capital Sand should not be entitled to the exemption for (what the Director says is) its minimal processing of the sand. We think the evidence shows that what Capital Sand did to the material it obtained from the rivers and sand and gravel bars was more than minimal, and easily met the ***Galamet*** requirement of producing articles with uses, identities, and values different from those of the original. And, as Capital Sand points out, the Director's "sand is sand" argument is not a new one for the Director. In ***Galamet***, the Director argued, unsuccessfully, that "metal scrap is metal scrap," against the Supreme Court's holding that the steel shreds produced in the taxpayer's process were more valuable than the raw product from

[65] 796 S.W.2d 624 (Mo. banc 1990).

whence it came.[66] And in ***Jackson Excavating Co. v. Administrative Hearing Comm'n***,[67] the Supreme Court rejected the Director's "water is water" argument, holding that the taxpayer transformed non-potable water into potable water.

When did Capital Sand's mining activities cease and manufacturing or processing activities begin?

Capital Sand poses this question, we assume, to establish a demarcation line between those activities that it thinks should be considered "mining" and those it thinks should be considered "manufacturing," "producing," or "processing." It cites ***West Lake Quarry***'s statement that "equipment…which is used to remove and dispose of overburden, to mine and remove the rock, to break up the rock in the quarry for use for dikes and haul it out of the quarry, [and] to haul the rest of the rock to the crusher for processing,"[68] justifies a conclusion that all of its efforts transporting material to the first point of processing constitutes mining.[69]

We would agree, except for the fact that Capital Sand separated sand, gravel, rock, and other materials on its Missouri River dredges before carrying those materials to shore or returning them to the river. Given that we find that separation of materials to be part of the manufacturing and processing that entitles Capital Sand to the exemptions it seeks, we conclude that there was no clear demarcation between mining and manufacturing or processing. However, the lack of demarcation does not negate our conclusion that it conducted all three of those activities.

The parts and equipment Capital Sand bought during the audit period (with one exception) were used in mining, manufacturing, and/or processing.

Capital Sand asserted, and provided admissible evidence in support of its assertion, that literally thousands of pieces of equipment and parts it bought during the audit period were used

[66] 915 S.W.2d 331, 334.
[67] 646 S.W.2d 48, 51 (Mo. 1983).
[68] 451 S.W.2d at 143.
[69] Petitioner's brief at 46-47.

in mining, manufacturing, or processing. The Director did not challenge any of this evidence, and we accept it and agree (with the exception set out below) that the equipment and parts were used in mining, manufacturing, and/or processing.

That exception was one admitted by Capital Sand in its brief—that parts it had bought for a loadout bin for the Jefferson City facility did not qualify for an exemption because the loadout bin merely stored finished products. Accordingly, Capital Sand admitted owing $222.91 in tax on the purchase of those parts, and our decision reflects the admission.

But those parts and equipment were *not* purchased and used
to establish new or to expand existing plants in this state.

Section 144.030.2(5)[70] creates an exemption for equipment or parts "purchased and used to establish new or to expand existing manufacturing, mining or fabricating plants in the state if such machinery and equipment is used directly in manufacturing, mining or fabricating a product which is intended to be sold ultimately for final use or consumption[.]" (Emphasis added.) Capital Sand's amended complaint alleges that it is entitled to such an exemption, but offered no evidence that it was establishing a new or expanding an existing manufacturing, mining, or fabricating plant. Furthermore, because Capital Sand failed to establish that element, there is no need to discuss whether the equipment was used directly in manufacturing, mining or fabricating a product that was intended to be sold ultimately for final use or consumption. Therefore, we conclude that it is not entitled to an exemption on this ground.

Summary

Capital Sand was engaged in mining, manufacturing, and processing, and the equipment and parts it bought (with one exception) were used directly in its mining, manufacturing, and processing. Therefore, its purchases were exempt from sales and use tax under § 144.030.2(4) and 144.054.2. As a result, Capital Sand is not obligated for the sales or use taxes assessed by

[70] RSMo Supp. 2011, now found at § 144.020.2(6) RSMo Supp. 2012. See footnote 29 above.

the Director as set out above, except for tax in the amount of $222.91 owed on the purchase of parts for a loadout bin for use in its Jefferson City facility as described above, along with any applicable additions to tax and statutory interest.

SO ORDERED on October 7, 2013.

\s\ *Marvin O. Teer, Jr.*
MARVIN O. TEER, JR.
Commissioner